REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1 and 8-10 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-10 are pending and under consideration. Reconsideration is respectfully requested.

ENTRY OF RESPONSE UNDER 37 C.F.R. §1.116

Applicants request entry of this Rule 116 Response and Request for Reconsideration because:

(a) the amendments to claims 1 and 8-10 should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and/or

(b) the amendments to claims 1 and 8-10 do not significantly alter the scope of the claims and place the application at least into a better form for appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in §714.12 that "[a]ny amendment that would place the case either in condition for allowance or in better form for appeal may be entered." (Underlining added for emphasis) Moreover, §714.13 sets forth that "[t]he Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

REJECTION UNDER 35 U.S.C. §103(a)

In the Office Action at pages 4-9, claims 1-3 and 5-10 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,406,519 to Ha in view of U.S. Patent No. 5,293,610 to Schwarz. The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Independent claim 1, in its amended form, is directed to a storage device and recites "a memory including a plurality of memory locations and storing secret data," "a test terminal inputting the test signals indicating a memory location among the plurality of memory locations," and "an instruction part sending a read out instruction for instructing the memory storing secret data to read out data stored at the memory location." Support for these amendments is found in the originally-filed specification at least at page 9, lines 18-31 and page 11, line 26 to page 12, line 5. Independent claims 8-10 are amended to recite similar features.

In a non-limiting example, Figures 4 and 5 show the sequencer 580 in the security part 58 starts the sequence counter 5801 to count when power is turned on. The sequence counter 5801 executes the memory address generating part 5803 to generate a memory address indicating the cipher key in the controller memory 56. Subsequently, the read-signal generating part 5801 is executed to generate a read-signal indicating to read data from the controller memory 46. In response to the generated memory address and read-signal, the controller memory 56 reads data, for example, 16 bytes of data from the indicated memory address. That is, the cipher key is read when the cipher key is stored or the initial data is read when the cipher key is not stored.

When the data read from the controller memory 56 is stored in the register 584, the decoder 585 decodes the data so as to determine whether the data is the cipher key or the initial data. Based on the result of the decoder 585, for example, the control flag latching circuit 586 latches "1" into the control flag when the data maintained in the register 584 is the cipher key or "0" into the control flag when the data maintained in the register 584 is the initial data (*see* Specification at page 13, lines 1-32).

Based on the control flag latched by the control flag latching circuit 586, the test selecting part 582 cuts off the test signal output from the test input I/F part 581 to prevent executing the test function when the data maintained by the register 584 is the cipher key. On

the other hand, the test selecting part 582 does not cut off the test signals but carries out the test function when the data maintained by the register 584 is the initial data (*see* Specification at page 13, line 33 to page 14, line 4).

As an advantage, in a non-limiting example, the security part 58 prohibits transferring to a test mode when the cipher key is stored in the controller memory 56 when power is ON. Therefore, it is possible to prevent the reading of the cipher keys by utilizing the test function. Also, the security part 58 controls transfer to the test mode when no cipher key is stored in the controller memory 56 when power is ON. Therefore, it is possible to test whether or not the storage device controller 50 performs as designed (*see* Specification at page 14, lines 5-16).

In contrast, Ha at col. 2, lines 10-30 only teaches a ROM device including a storage cell array for storing data and a security code cell array for storing security codes. In Ha, when a ROM device is turned ON, an initial set of data input from outside the ROM device is compared with the data stored in the security code cell array. If these data are equal to each other, the system according to Ha permits that data stored in the storage cell array to be read while the system is powered on; but if not, read access to the data is permanently disabled. Thus, Applicants respectfully submit that Ha only teaches a ROM device storing a static array of security code cells which are set when the ROM device is manufactured.

However, Ha at col. 2, lines 10-30 fails to teach or discuss "inputting the test signals indicating a memory location among the plurality of memory locations." Rather, Ha only discusses "external input data" which "are compared with the data stored in the security code cell array." Because Ha is concerned only with an initial power-on security check, it is respectfully submitted that Ha at col. 2, lines 10-20 fails to teach or suggest inputting a test signal indicating a memory location among the plurality of memory locations.

Moreover, Ha at col. 2, lines 10-30 only compares the external input data to the static array of security code cells. Applicants respectfully submit that Ha fails to teach or suggest "decoding whether or not the data read out by the memory stored at the memory location in response to the data reading instruction is the secret data stored in the memory," as recited in amended independent claim 1, for example. Rather, because Ha only compares the external input data to the security code cell array which is always at the same location in the ROM device, and accordingly does not teach or suggest this feature of the amended independent claims.

Additionally, Applicants submit that Schwarz teaches only a memory system including a first alterable memory, a second non-alterable memory and a data bus for allowing external access to data stored in the memory system during a test mode of operation. Further, Applicants submit that Schwarz fails to teach or suggest the features of the amended independent claims. Accordingly, Applicants respectfully submit that amended independent claims 1 and 8-10 and dependent claims 2, 3, and 5-7 depending either directly or indirectly therefrom patentably distinguish over both Ha and Schwarz and are therefore in condition for allowance.

In the Office Action at pages 9-10, claim 4 was rejected under 35 U.S.C. §103(a) over Ha and Schwarz, and further in view of U.S. Patent No. 4,521,852 to Guttag. The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

As dependent claim 4 depends directly from claim 1, Applicants respectfully submit that claim 4 also patentably distinguishes over both Ha and Schwarz. Accordingly, Applicants respectfully submit that claim 4 is also in condition for allowance.

CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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